



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,656	07/21/2003	Wen-Chien David Hsiao	HSJ920030044US1	7023

7590 02/08/2005

Robert O. Guillot, Esq.  
INTELLECTUAL PROPERTY LAW OFFICES  
Suite 660  
1901 South Bascom  
Campbell, CA 95008

EXAMINER

TUPPER, ROBERT S

ART UNIT	PAPER NUMBER
2652	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/624,656

Applicant(s)

HSIAO ET AL.

Examiner

Robert S Tupper

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/21/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2652

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6, 14, and 17 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by INOUE et al (6,614,107).

These claims read on the well known prior art merged R/W heads. It is well known that operation of the MR read head produces heat which will produce heating of the write head pole tips. Note column 12 lines 7-8 of INOUE et al acknowledges the heating effect produced by operation of the MR head. Note figure 10A of INOUE et al shows such a merged R/W head. The head of INOUE et al has a write portion with a first pole (8) and a second pole (15) with a large yoke portion (not numbered – the portion remote from the medium) and a narrow pole tip (not numbered – the portion immediately adjacent the medium), and a heating element (the MR read head) adjacent the pole tip outside the gap. Concerning claims 14 and 17, INOUE et al clearly indicates that the head is used with a disk drive (see column 10 lines 54-56).

3. Claims 1-3, 6-8, 11, 12, 14, 15, 17, and 18 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by HAMANN et al (2004/0240109).

Art Unit: 2652

Note figures 5A-5C and 6A-6B. HAMANN et al shows a thin film head for use in a disk drive (see figure 9) with heating elements (510 and 550). The heating elements are located both between the pole tips (510) and outside the pole tips (550). The heating elements can be connected in series with the coil (see the embodiments of figure 6a and 6b).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 5, 9, 10, 13, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAMANN et al (2004/0240109).

HAMANN et al shows a thin film head with heater substantially as claimed. HAMANN et al differs in not specifying (A) the listed configuration for the heater and leads (re claims 4, 5, and 16), (B) the exact value ranges for properties (re claims 9, 10, 19, and 20), and (C) the exact materials (re claim 13).

Concerning (A) and (B), it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the listed configurations and values in the head of HAMANN et al. The motivation is as follows: would have been the obvious result of routine experimentation and optimization.

Art Unit: 2652

Concerning (C), it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize one of the listed materials. The motivation is as follows: these are all well known conductive, heater materials. One of ordinary skill in the art would utilize any such known materials where none were specified.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

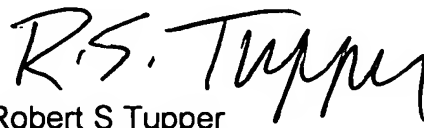
KASIRAJ et al (6,493,183) is another showing of a thin film head with a heater element for use in a disk drive. It has not been applied to avoid multiple rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert S Tupper whose telephone number is 703-308-1601. The examiner can normally be reached on Mon - Fri, 6:00 AM - 3:30 PM (first Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 703-305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Robert S Tupper  
Primary Examiner  
Art Unit 2652

rst